

he still holds to his original assertion as to the existence of perforations in these shells.

When Prof. King shall have shown the least ground for the belief that shell-tissue of the most peculiar and characteristic kind can be formed during the process of fossilization, so as to fill vacuities that existed in the recent shell (which is just as if, in the silicification of a piece of wood previously perforated by large holes, these holes should be filled up by true woody tissue), his assumption that the whole of Mr. Davidson's type specimen of *Spirifer cuspidatus* and that the imperforate spaces in the shells of *Syringothyris* were originally perforated may deserve consideration. Until then, I venture to think that the imperforateness of the former type, and the patchiness of the perforations in the latter, are established by Prof. King's confessed inability to set aside the facts stated by me on these points, as the direct results of careful and experienced observation.

Trusting that this is the last occasion on which I shall feel it necessary to address you on this subject,

I remain, Gentlemen,

Your obedient Servant,

WILLIAM B. CARPENTER.

XXXV.—*Description of a new Species of Thylacine* (*Thylacinus breviceps*). By GERARD KREFFT, Curator and Secretary of the Australian Museum, Sydney.

[Plate XVII.]

SKULL shorter ($6\frac{5}{8}$ inch.) than that of *T. cynocephalus* ($7\frac{1}{2}$ inch.); the palatal openings much reduced in size; occipital foramen larger than in the well-known species. The anterior part of the skull is not much compressed; and the sharp nick so prominent in all skulls of *T. cynocephalus*, between the second and third premolars, is wanting in the present species. The greatest difference exists in the teeth, which in the new species are very large, the most prominent being the second and third molars in both jaws. The canines are thicker, and form a shorter curve; the outer incisor of the upper series is also very much larger than the corresponding tooth in *T. cynocephalus*.

I enclose three photographs of the skulls of both animals* in different positions, both very perfect, and that of *T. cynocephalus* larger than that of the new species. The last molar in *T. breviceps* has been lost from both specimens (in possession of the Trustees of this Museum); but the sockets indicate

* We have given in the Plate the figures of the new species only.—ED.

a larger tooth, though, owing to the youth of the animal, it is not yet in the same position as the one shown in the skull of *T. cynocephalus*.

The existence of a second Thylacine has been known to old residents in Tasmania for years past, as they were in the habit of distinguishing the two kinds by the names of Greyhound and Bulldog-Tiger. Mr. George Masters, Assistant Curator of the Australian Museum, has spent some nine months on the island; and being anxious to clear this matter up, he collected about twenty-six skulls, two of which belong to the Thylacine for which I now propose the name of *breviceps*.

I shall, on a future occasion, give you a fuller account of the excellent collection made by Mr. Masters.

Sydney, May 2, 1868.

XXXVI.—*Notice of two new Species of Salamandra from Central America.* By Dr. J. E. GRAY, F.R.S. &c.

MR. OSBERT SALVIN has lately sent to the British Museum a collection of animals in spirits, collected at Guatemala and Costa Rica. It contains two species of *Salamandra*, which appear not to have been previously entered in the catalogues.

Ædipus Salvinii.

Black; chin, throat, and underside of body and tail and limbs pale brown; back and upper surface of the tail for about two-thirds of its length opaque white, with irregular-shaped black spots, and connected in front with a streak on each side of the back and head, continued to the eyebrows. The black spots have a very narrow white margin. The head very short; nose blunt, short, rounded; nostrils lateral, below the most prominent part of the nose, with an indistinct pale spot under them to the edge of the upper lip. The toes very short, webbed to the tip. Tail cylindrical, tapering, almost as long as the body and head.

Hab. Guatemala (Osbert Salvin, Esq.). B.M.

OPHIOTRACHUS.

Body long, cylindrical; tail very long, cylindrical, rounded at the end. Head very small; mouth large; eyes rather large, lateral; nose blunt, ovate; tongue circular, peltate. Legs far apart, elongate, slender, weak; toes very short, subequal, $\frac{4}{5}$, free. Skin smooth, closely and minutely black-dotted. Vent linear. Teeth minute in both jaws; palatine teeth in an arched line on each side of the internal nostrils.

